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| 10/598,237   | 03/06/2007  | Michiru Yokobori     | 41172               | 1549             |
| 52054 7590 06/25/2009<br>PEARNE & GORDON LLP                   |             |                      | EXAMINER            |                  |
| 1801 EAST 9TH STREET<br>SUITE 1200<br>CLEVELAND, OH 44114-3108 |             |                      | ZHAO, WEI           |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2419                |                  |
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# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patdocket@pearne.com dchervenak@pearne.com

## Application No. Applicant(s) 10/598,237 YOKOBORI ET AL. Office Action Summary Examiner Art Unit WEI ZHAO 2419 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 22 August 2006. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-9 is/are pending in the application. 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1-9 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 22 August 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :4/13/2009, 9/13/2008, 7/18/2007, 8/22/2006.

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#### DETAILED ACTION

# Claim Objections

 Claims 1-4, 8, and 9 are objected to under 37 CFR 1.75(c) because of the following informalities:

Regarding claim 1, it is suggested to change the term "the transmission" in line 14 to --- transmission ---. The term "transmission" in line 16 seems to refer back to "transmission" in line 14. If this is true, it is suggested to change "transmission" to --- the transmission ---.

Regarding claims 2 and 3, they are objected to since they both depend from claim 1

Regarding claim 4, the term "MAC addresses" in line 5 seems to refer back to "MAC addresses" in line 2. If this is true, it is suggested to change "MAC addresses" to --- the MAC addresses ---

Regarding claim 8, the term "MAC addresses" in line 4 seems to refer back to "MAC addresses" in claim 7 line 14. If this is true, it is suggested to change "MAC addresses" to --- the MAC addresses ---.

Regarding claim 9, the term "MAC addresses" in line 19 seems to refer back to "MAC addresses" in line 17. If this is true, it is suggested to change "MAC addresses" to — the MAC addresses —.

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### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35
 U.S.C. 102 that form the basis for the rejections under this section made in this
 Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

 Claims 1-2, 4-5, 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Dravida et al. (US 2002/0075875).

Regarding claim 1, Dravida et al. teach the access network system for making access to a given network by a subscriber terminal (paragraph [0077] lines 5-15), the access network system comprising: a first network terminal device connected to the given network and terminating a first network for transfer on a layer 2 level (paragraph [0077] lines 5-15); a second network terminal device able to put the subscriber terminal under control and terminating a second network for transfer on the layer 2 level (paragraph [0079] lines 1-11); and a subscriber station device for connecting the first and the second networks with each other and terminating each of the first and the second networks (paragraph [0078] lines 1-9), wherein: the transmission of the frame is conducted by using a VLAN pass identified by a VLAN tag in the second network (paragraph [0204] lines 10-14), and transmission of the frame added with a frame header including the VLAN tag used in the second network is conducted (paragraph [0204] lines 1-8).

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Regarding claim 2, Dravida et al. further teach the access network system, wherein, in the first network, transmission of the frame is conducted by using a VLAN pass identified by a VLAN tag different from the VLAN tag used in the second network (paragraph [0285] lines 1-12).

Regarding claim 4, Dravida et al. teach the access network system, wherein MAC addresses of the first network terminal device and the subscriber station device used in the first network are generated according to the VLAN tag used in the first and the second networks (paragraph [0281] lines 25-34), and MAC addresses of the first network terminal device and the subscriber station device are set up to destination MAC address and source MAC address of the frame header (paragraph [0281] lines 25-34).

For claim 5, it is similar to claim 1. Claim 5 is rejected for the same reasons as to claim 1.

Regarding claim 7, Dravida et al. teach the network terminal device included in an access network system where a subscriber terminal makes access to a given network, connected to the given network and connected to a first network arranged on the subscriber terminal side (paragraph [0077] lines 5-15), wherein the network terminal device comprises: means for extracting a VLAN tag from a frame header, the VLAN tag being inserted in the frame header added to the frame received from the first network (paragraph [0204] lines 1-8), the VLAN tag of the second network being added to the frame in a second network passing through before being transferred in the first network (paragraph [0204] lines 10-

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14); and storage means for storing by matching the VLAN tag extracted from the frame header with MAC address of the subscriber terminal being set up as destination of the frame (paragraph [0346] lines 1-10).

Regarding claim 8, Dravida et al. teach the network terminal device (paragraph [0077] lines 5-15), wherein the network terminal device comprises: means for adding a frame header, including the VLAN tag matched with MAC address of the subscriber terminal and stored, to the frame when a frame addressed to the subscriber terminal is received from the given network side (paragraph [0204] lines 1-14); and means for sending the frame added with the frame header including the VLAN tag to the first network (paragraph [0204] lines 1-8).

Regarding claim 9, Dravida et al. teach the network terminal device included in an access network system where a subscriber terminal makes access to a given network and being able to put the subscriber terminal under control (paragraph [0077] lines 5-15), wherein the network terminal device comprises: means for transmitting information to identify the given network to a subscriber station device where the subscriber terminal passes through when connecting to a given network in case a connection setup information to a given network is received from the subscriber terminal (paragraph [0077] lines 5-15); means for receiving a VLAN tag corresponding to connection to a given network by the subscriber terminal as a response to information to identify the given network from the subscriber station device (paragraph [0079] lines 1-11); storage means

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for storing by matching the VLAN tag with MAC address of the subscriber terminal (paragraph [0346] lines 1-10); means for adding the VLAN tag being matched with MAC address of the subscriber terminal in the arbitrary frame and stored when an arbitrary frame to be sent from the subscriber terminal to a given network is received (paragraph [0207] lines 1-13); and means for sending the frame added with the VLAN tag to the subscriber terminal (paragraph [0281] lines 25-34).

### Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1,
  148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - Determining the scope and contents of the prior art.
  - Ascertaining the differences between the prior art and the claims at issue.
  - Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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 Claims 3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dravida et al. (US 2002/0075875) in view of Chen et al. (US 2003/0142672).

Regarding claim 3, Dravida et al. teach all the subject matter with the exception for implementing the response to the subscriber request. Chen et al. from the same or similar field of endeavor teach implementing fairness of the method, wherein the subscriber station device is so arranged as to generate the VLAN tag used in the second network in response to a request of connection to the given network from the subscriber terminal (paragraph [0008] lines 1-9). Thus, it would have been obvious to one of ordinary skill in the art to implement the method of Chen et al. in the system of Dravida et al. The method of Dravida et al. can be implemented on any type of the method on implementing the response to the subscriber request, which is taught by Chen et al. The motivation for using the method of Dravida et al. on implementing the response to the subscriber request is to enhance the quality-of-service of the data transmission.

For claim 6, it is similar to claim 3. Claim 6 is rejected for the same reasons as to claim 3.

#### Conclusion

 The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Application/Control Number: 10/598,237 Art Unit: 2419

network-based VPNs.

8:00am-12:00noon.

McDysan (US 6,778,498) is cited to show a method for supporting

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WEI ZHAO whose telephone number is (571)270-5672. The examiner can normally be reached on Monday-Thursday,

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dang Ton can be reached on 571-272-3171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/W. Z./ Examiner, Art Unit 2419

/DANG T TON/ Supervisory Patent Examiner, Art Unit 2419/D. T. T./ Supervisory Patent Examiner, Art Unit 2419